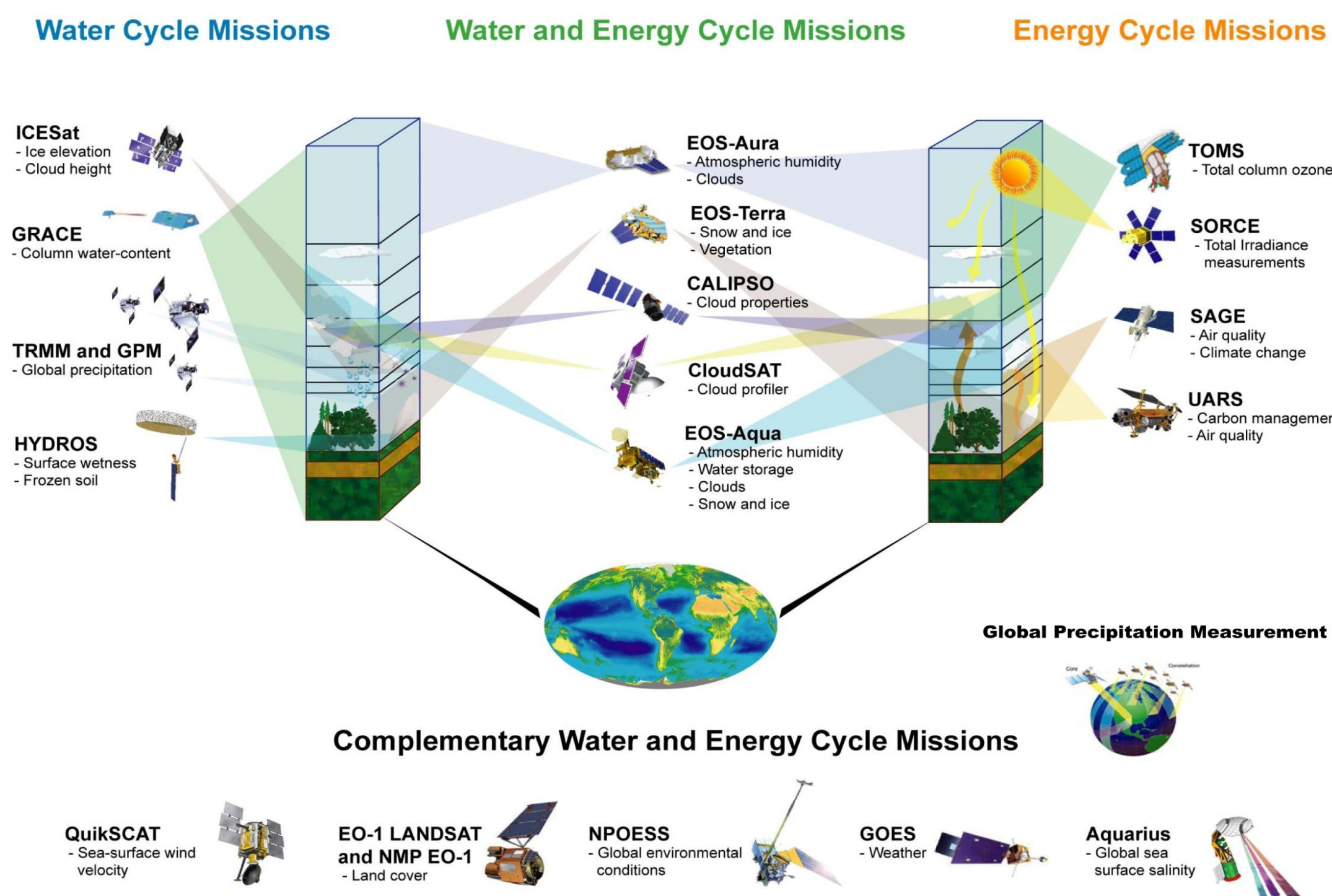
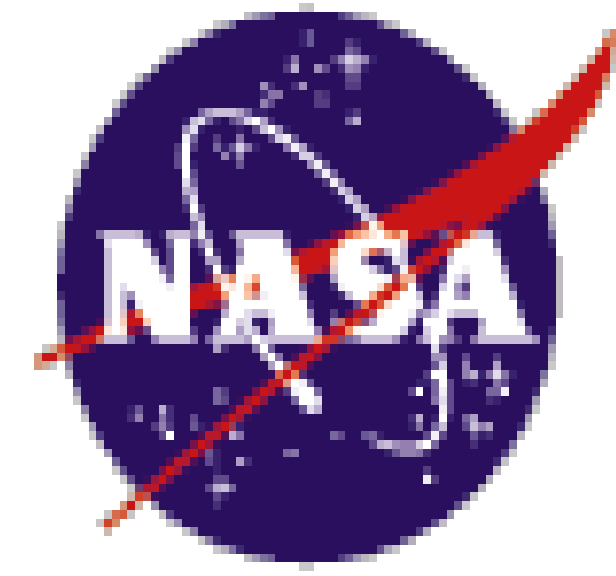




Applications of Satellite Real-Time Receiving Stations of CRS and CEOE for Wetland Research

Young-Heon Jo¹, Richard Field¹, Kurt Philipp², and Andrew Homsey¹

¹University of Delaware and ²Wetland Research Services



Complementary Water and Energy Cycle Missions

Satellites for EOS



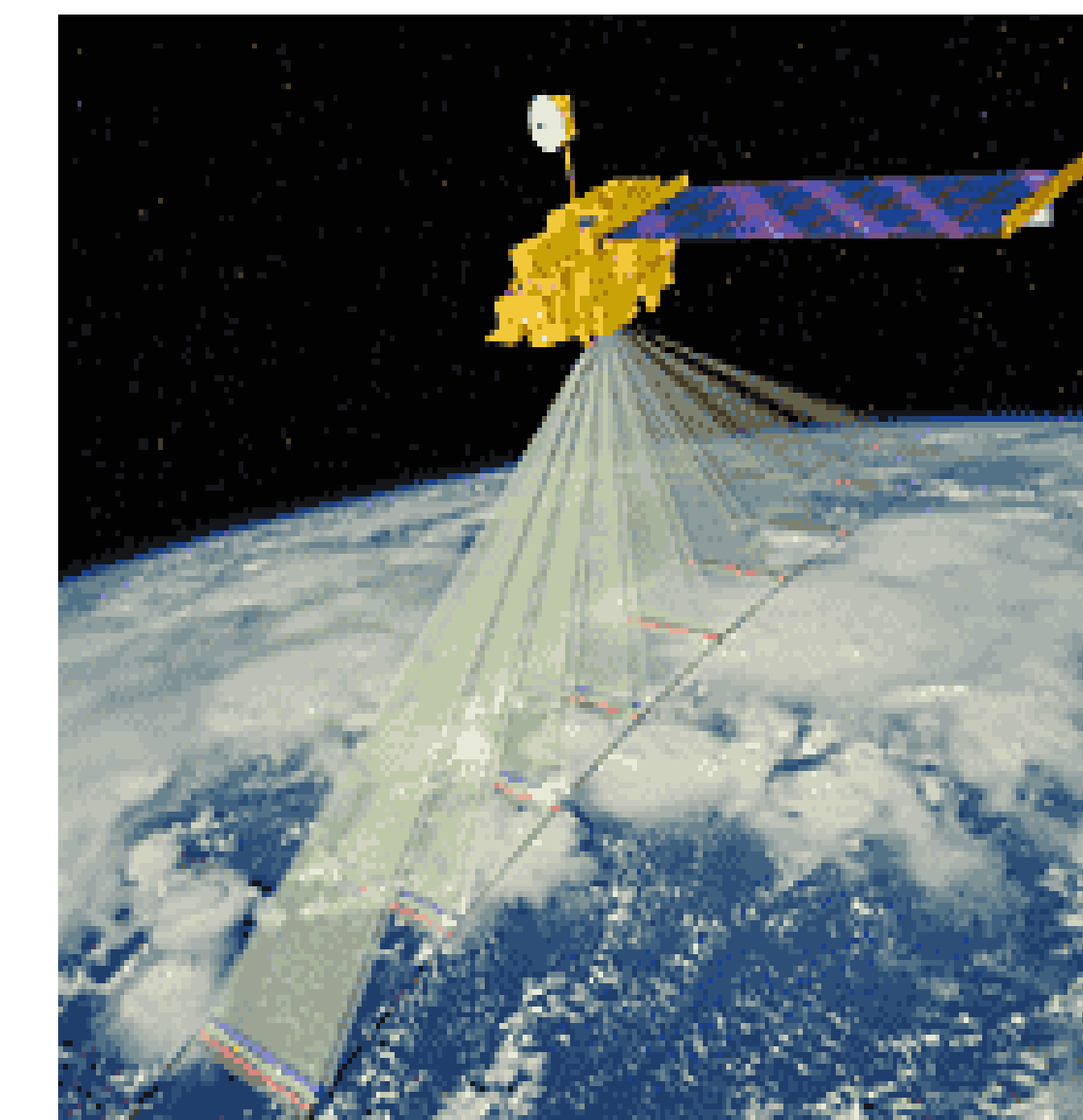
2.4m X-band receiving station for polar orbit satellites



3.7m L-band receiving station For geostationary satellites

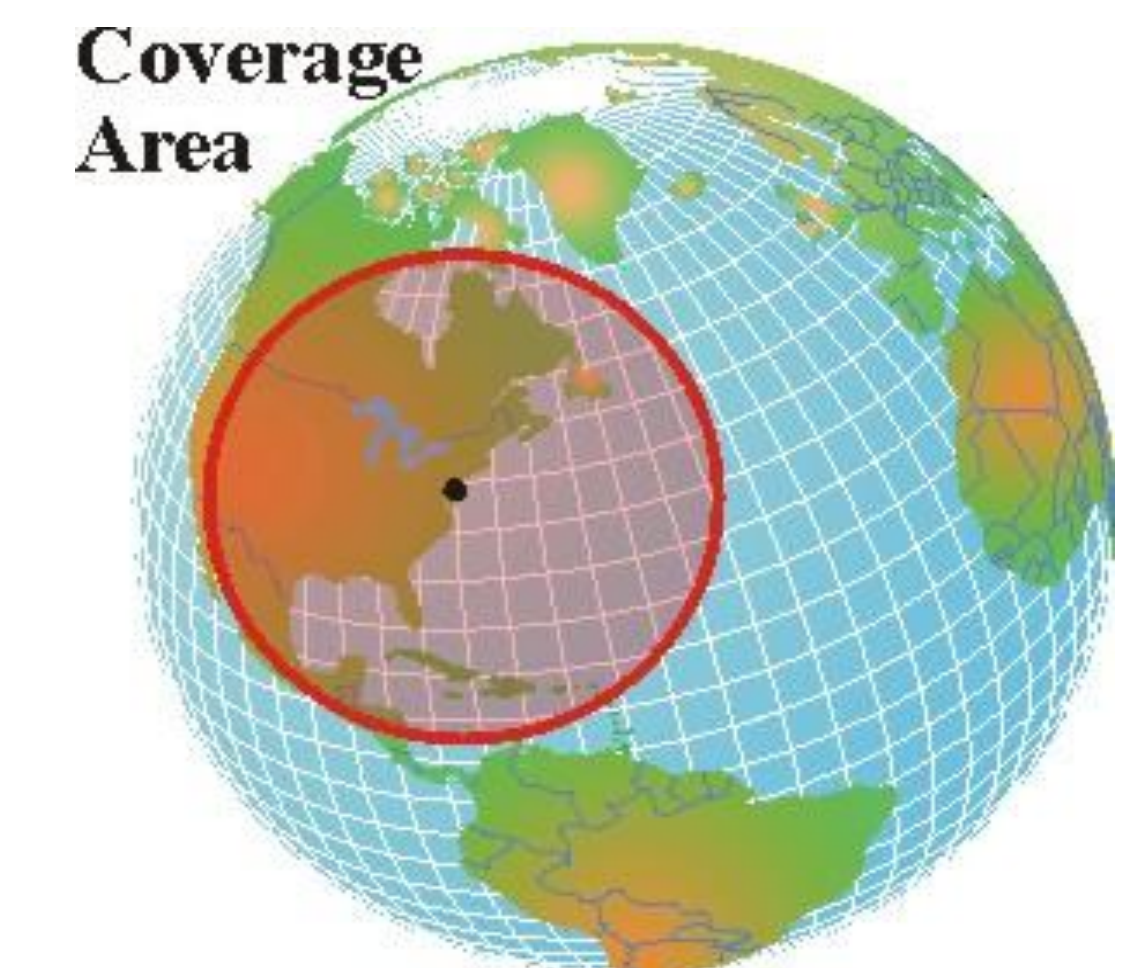


NOAA AVHRR

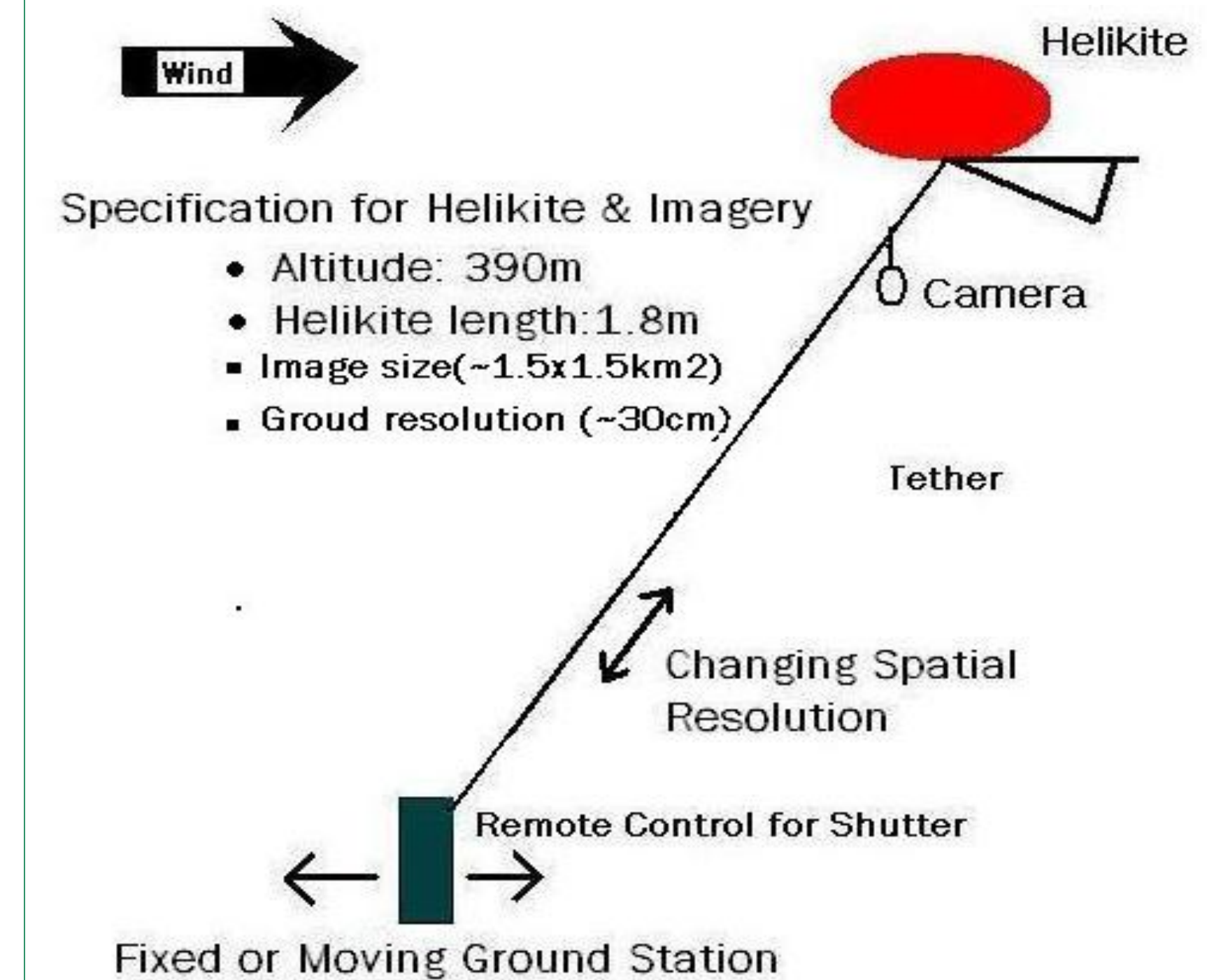


MODIS-Terra

Features	Benefits
Images are displayed line-by-line during satellite overpass	From total automation to complete interactivity
Automated pass scheduling	Select standard/own scripts for data products
User-selected areas of interest (AOI)	GUIs allow you to see >20 map projections
GUI script builder to generate a wide variety of data products	Users can set their own rules
Full-featured image visualization	Far more efficient and highly selective data capture and processing
Full import/export capability	Easily build and modify scripts for MODIS, AVHRR and other sensor data
	Tune image geolocation accuracy for improved data fusion with other sources of imagery
	Image arithmetic, user defined data layers, time-series animation, etc
	Select from over 20 file formats
	Export directly into third party environments such as ERDAS® and ENVI®



The overpass times (give or take 1 hour) are 1:30 AM, 4:30 AM, 7:30 AM, 1:30 PM, 4:30 PM and 7:30 PM.



Atmosphere

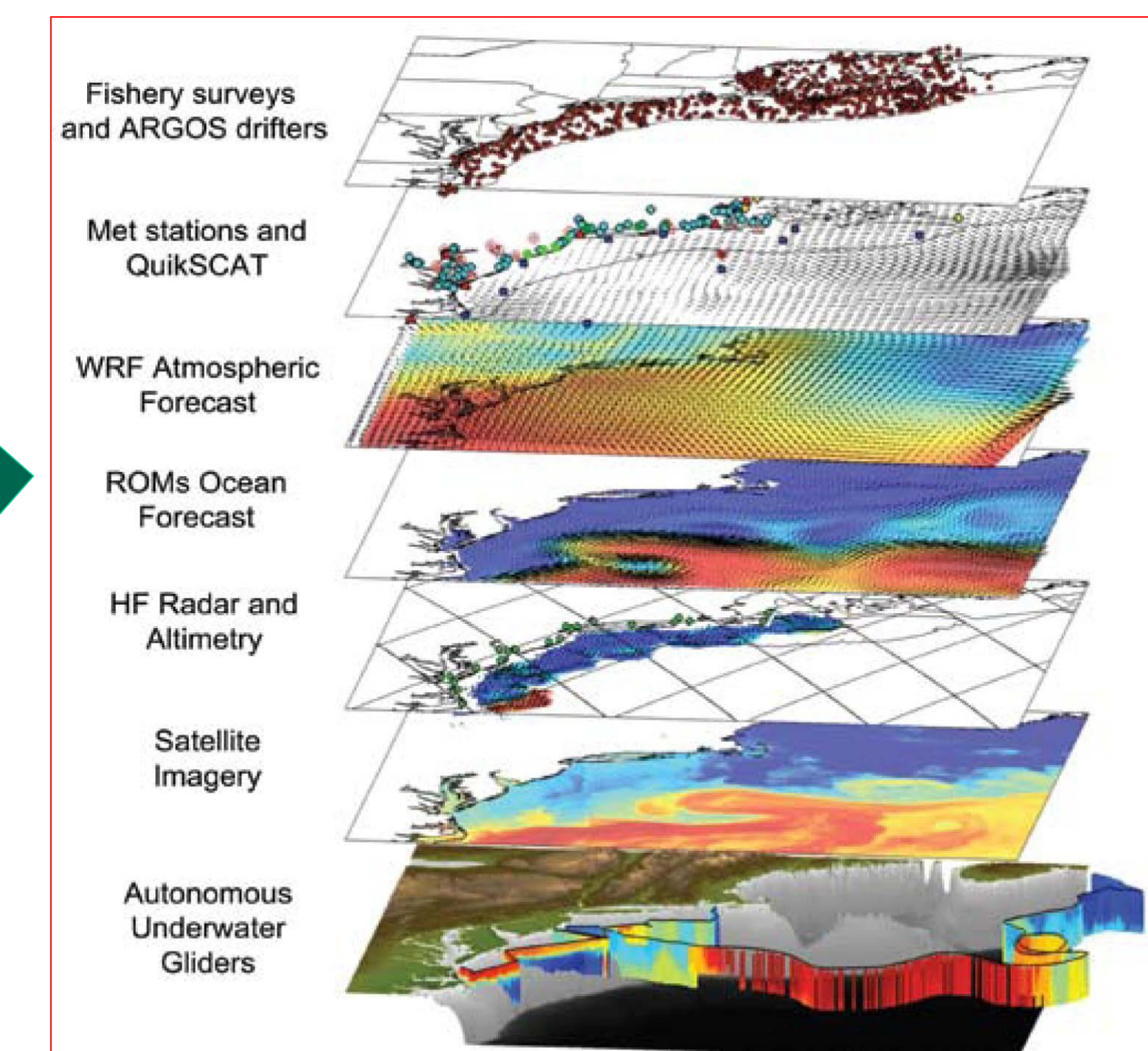
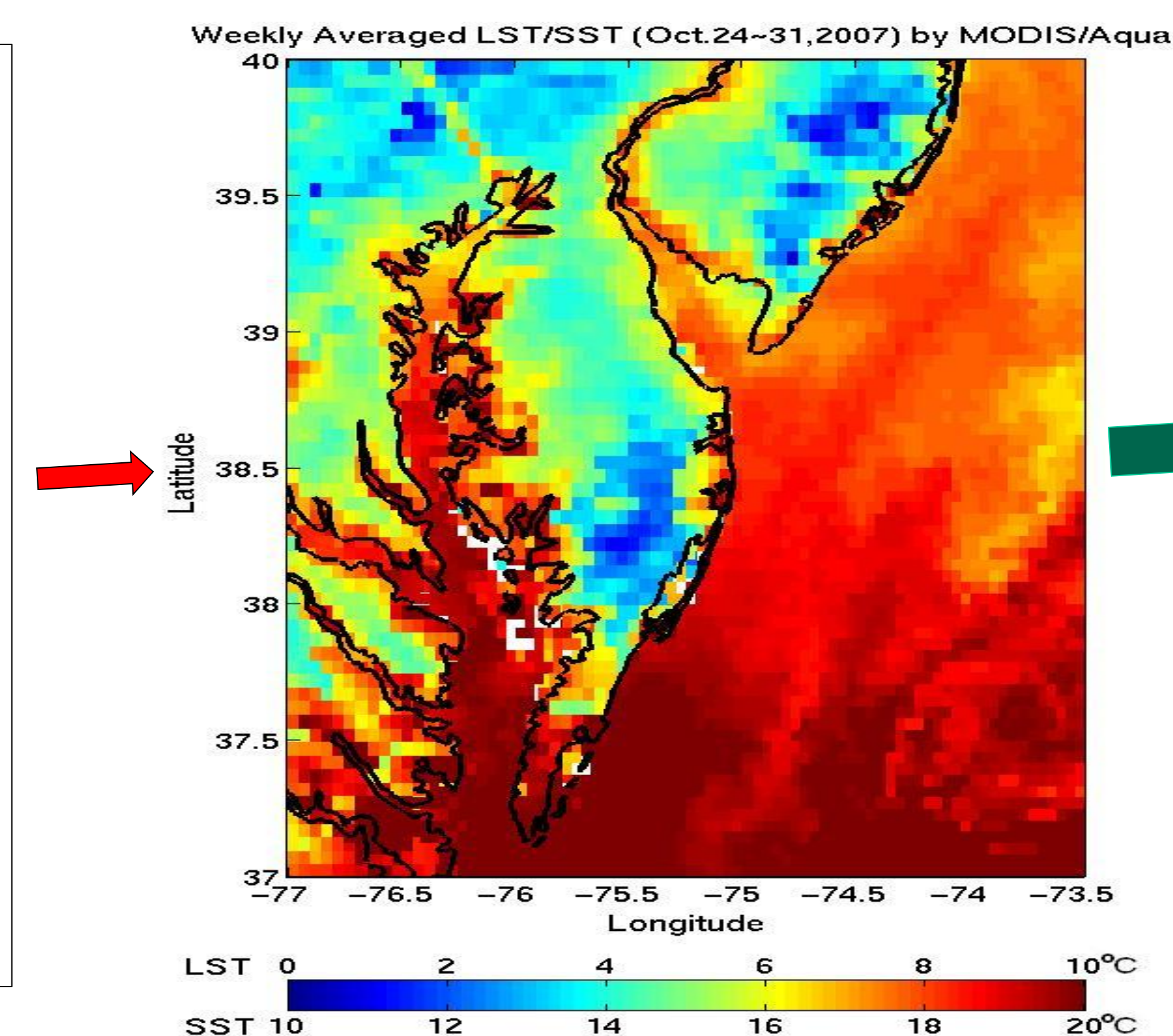
- Cloud
- Aerosol cloud top properties
- Cloud phase
- Atmospheric profiles
- Corrected reflectance

Land

- Active fires
- Surface albedo
- Vegetation index
- LST
- Vegetation index
- Snow cover/depth
- Surface reflectance
- Land cover/change
- Evapotranspiration
- Soil moisture
- Agriculture surveys

Water

- SST
- Primary production
- Pigment concentration
- Coccolith concentration
- Suspended solids
- Sea ice
- K490nm
- Organic matter
- Clear water epsilon
- Aerosol properties



Satellites

Ground Stations

Research